

Math 112
Quiz 7
Wednesday, April 9, 2008

1. Find the sum of the series $\sum_{j=2}^{\infty} \frac{3^j}{4^{j+1}}$. No simplification is necessary.

2. Determine whether the series $\sum_{n=1}^{\infty} \frac{n}{n^3 + 1}$ converges or diverges.

3. Determine whether the series $\sum_{n=1}^{\infty} \frac{n^3}{5^n}$ converges or diverges.

4. Determine whether the series $\sum_{j=1}^{\infty} \frac{(-1)^{j+1}}{j^2}$ converges or diverges.